

What is claimed is:

- Sub A1
1. A stabilization system for improving the melt viscosity of polypropylene during fiber processing consisting essentially of:
 - a phenolic anti-oxidant;
 - a liquid phosphite; and
 - a liquid carrier.
 2. The stabilization system as claimed in claim 1 wherein the phenolic anti-oxidant is a cinnamate derivative.
 3. The stabilization system as claimed in claim 2 wherein the liquid phosphite is trisnonylphenyl phosphite.
 4. The stabilization system as claimed in claim 3 wherein the liquid carrier is mineral oil.
 5. The stabilization system as claimed in claim 4 wherein the phenolic anti-oxidant is octadecyl 3,5-di-tert-butyl-4-hydroxyhydrocinnamate.
 6. The stabilization system as claimed in claim 5 comprising approximately 150 – 500 ppm trisnonylphenol phosphite.
 7. The stabilization system as claimed in claim 6 comprising approximately 50 – 100 ppm octadecyl 3,5-di-tert-butyl-4 hydroxyhydrocinnamate.
 8. The stabilization system as claimed in claim 7 additionally comprising approximately 150-500 ppm of tris(2,4-di-tert-butylphenyl)phosphite.
 9. The stabilization system as claimed in claim 1 wherein the phenolic anti-oxidant and the liquid phosphite are in a concentration ratio of about 1:2.0 to about 1:6.7.
 10. The stabilization system as claimed in claim 9 wherein the liquid phosphite is trisnonylphenol phosphite.
 11. The stabilization system as claimed in claim 10 wherein the phenolic anti-oxidant is octadecyl 3,5-di-tert-butyl-4-hydroxyhydrocinnamate.

Subpart
cont.

12. The stabilization system as claimed in claim 11 wherein the liquid carrier is mineral oil.
13. The stabilization system as claimed in claim 13 additionally comprising approximately 150-500 ppm of tris(2,4-di-tert-butylphenyl)phosphite.
14. A stabilizer mixture suitable for improving the melt viscosity of polypropylene which mixture, based on the mass of polypropylene, consists essentially of:
approximately 50 – 100 ppm of a phenolic anti-oxidant;
approximately 150-500 ppm of a liquid phosphite; and
a liquid carrier.
15. The stabilizer mixture as claimed in claim 14 wherein the liquid phosphite is trisnonylphenyl phosphite.
16. The stabilizer mixture as claimed in claim 15 wherein the phenolic anti-oxidant is a cinnamate derivative.
17. The stabilizer mixture as claimed in claim 16 wherein the phenolic anti-oxidant is octadecyl 3,5-di-tert-butyl-4-hydroxyhydrocinnamate.
18. The stabilizer mixture as claimed in claim 17 wherein the liquid carrier is mineral oil.
19. The stabilizer mixture as claimed in claim 18 additionally comprising approximately 150-500 ppm of tris(2,4-di-tert-butylphenyl)phosphite.
20. A stabilization system suitable for improving the melt visocisity of polypropylene homopolymer consisting essentially of:
50 – 100 ppm of octadecyl 3,5-di-tert-butyl-4-hydroxyhydrocinnamate phosphite;
150 – 500 ppm of trisnonylphenol phosphite; and
mineral oil.

0991301-11601